### River Restoration Update



In December 2015 DNR and many partners developed a *River Restoration Strategy* to align DNR and other state river programs and move towards a restoration program. The strategy and related materials are web-available at: <a href="http://www.iowadnr.gov/Environmental-Protection/Water-Quality/River-Restoration">http://www.iowadnr.gov/Environmental-Protection/Water-Quality/River-Restoration</a> A variety of priority actions are laid out in the strategy. In the year since it was developed, progress has been made on a variety of fronts:

#### Developing a Stream Mitigation Program for Iowa.

Significant progress has been made regarding development of a standard Iowa method for quantifying impacts to streams and the benefits of proposed mitigation. The Army Corps issued a draft Iowa Stream Mitigation Method (ISMM) on October 1, 2016, followed by a 60-day public comment period. IDNR partnered with representatives of the Corps, the Iowa Department of Transportation, and the Iowa Department of Agriculture to hold an information session regarding the draft ISMM which included a tour of an ongoing mitigation project in Waukee. The Army Corps plans to take comments into consideration and conduct an extensive testing period in consultation with members of the Inter-agency Review Team. Finalization of the ISMM is expected in the summer of 2017. The draft ISMM and additional information are available via the IDNR's River Restoration webpage.

One component implementing mitigation projects is investigating the feasibility of an *In-Lieu Fee* program. DNR created a project team to evaluate the feasibility of such a program in Iowa. The project team reviewed primary and secondary sources to assess historic patterns and demand for stream mitigation, and developed revenue forecasts for a program under various market scenarios and cataloged resources required to provide mitigation projects.

The in-lieu fee team compiled these market assessments and an alternatives analysis into a report for department leadership. Should Iowa DNR decide to proceed with sponsoring a third-party compensatory mitigation system for streams, the next steps include close coordination with the Iowa Department of Transportation, building a prioritization framework for mitigation project selection, and working with agency and community partners to structure the program and obtain authorization.

#### Develop a Best-Practices Toolbox for River Restoration.

A process improvement design event was held with many river users to draft the scope of a "River Restoration Best-Practices Toolbox". This was used to for a competitive bidding process. Proposals where submitted in October. DNR selected Stantec Consultants for this project, and signed a contract in December. The BMP Toolbox will include an assessment tool and an analysis tool, along with a suite of practices, including design drawings and specifications that can be used for restoration projects. An Interagency Advisory Team has been assembled to provide feedback to Stantec. The anticipated completion date is early 2018.

In addition, DNR River Programs is completing the *Iowa Riverside Plant Selection Tool* project, to provide guidance for restoration project designers about native plant species selections for river restoration and stability projects in Iowa. It helps make decisions for plantings at various elevations along the bank profiles within the restoration project. It also helps designers make regionally appropriate selections to the county level, and provides basic information about successful planting for each species.

#### Provide Guidance for Project Funding.

DNR and partners have compiled a summary of various ways to fund restoration projects. In addition to grants and loans, it describes option for using volunteers, donations, and fundraising to offset some of the project cost, and it notes state/federal agencies that may be able to offer free technical support for designing portions of projects. The funding options are on the River Restoration web page.

## Increased collaboration between Fisheries, Wildlife, and Water Trails programs for conservation planning and identification of priorities.

Streams have been prioritized individually by the programs and a GIS layer completed that collectively summarizes the overlap, which account for about 10% of the states mapped river and stream miles. Work continues to summarize priority areas into a plan before coordination with other internal and external river programs and interests can occur and a list of prioritized projects is developed.

# Add a Stream Geomorphologist/Engineer with Hydrologic and Hydraulic Modeling Capabilities to DNR staff expertise.

DNR is investigating internal and external resources to satisfy the needs for geomorphology and hydrologic engineering expertise to assist with River Restoration and other departmental efforts.

### Assure coordination with the Floodplains program during project planning.

Floodplains has worked with Fisheries staff to develop and improve existing checklists for certain river restoration activities including bank stabilization, instream fish habitat and vortex weirs, to help assure that restoration activities are aligned with flood plain rules and best practices.